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(54) Title: MATRIX SCREENING METHOD

(57) Abstract: The invention concerns a method which can be used to screen two or more repertoires of molecules against one another and/or to create combinatorial repertoires by combining two or more repertoires. In particular, the invention relates to a method whereby two repertoires of molecules can be screened such that all members of the first repertoire are tested against all members of the second repertoire for functional interactions. Furthermore, the invention relates to the creation and screening of antibody repertoires by combining a repertoire of heavy chains with a repertoire of light chains such that antibodies formed by the all combinations of heavy and light chains can be screened against one or more target ligands.

### INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER IPC 7 B01J19/00 G01N G01N33/68 C12N15/10 C1201/68 C1201/70 B01L3/00 According to International Patent Classification (IPC) or to both national classification and IPC B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) BOIJ GOIN CI2N BOIL C120 IPC 7 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, WPI Data C. DOCUMENTS CONSIDERED TO BE RELEVANT Relevant to claim No. Citation of document, with indication, where appropriate, of the relevant passages Category ° 1-53 WO OO 56444 A (BLANKENSTEIN GERT ; TORSANA X BIOSENSOR A S (DK); AHL THOMAS (DK); BO) 28 September 2000 (2000-09-28) page 5, line 23 -page 15, line 14 page 24, line 29 -page 26, line 28 page 30, line 17 -page 32, line 7; example WO 93 09668 A (AFFYMAX TECH NV) 1-5,7, X 27 May 1993 (1993-05-27) 10-13. 17-19, 29-46, 52.53 page 14, line 13 -page 25, line 5; claims 1-17,35-47; figures 1-4 -/--Further documents are listed in the continuation of box C. Patent family members are listed in annex. Special categories of cited documents: "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the international "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "Y" document of particular relevance; the claimed invention cannot be considered to involve an invention step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. "O" document referring to an oral disclosure, use, exhibition or \*P\* document published prior to the International filing date but later than the priority date claimed \*&\* document member of the same patent family Date of mailing of the international search report Date of the actual completion of the International search 06/05/2002 25 April 2002 Authorized officer Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo ni, Fax: (+31-70) 340-3016 Bradbrook, D

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